# **Geographic Information Systems, AAS**

Award Granted: Associate in Applied Science in Geographic Information Systems Credits/Contacts Required: **61/63**  Major code: 03/353 CIP Code: 151102

## Description

Geospatial studies encompasses several learning domains including geography (study of the features of the earth) and geodesy (study of the measurement and representation of the earth), and its uses with cartography, geographic information systems, and geospatial analysis to solve problems in a variety of disciplines ranging from life sciences to military to health care fields. Computer and mobile application-based tools such as spatial analysis, 3D mapping, and geovisualization make this career both engaging and challenging.

## General Education Requirements (Min 17 Credits)

- ENGL 101 Rhetoric & Composition Credits: 3
- MATH xxx Mathematics Elective (MATH 105, MATH 107, or higher) **Credits: 4**
- GEOG 110 Physical Geography Credits: 4

## Program Requirements (Min 44 Credits)

- BIOL 107 Environmental Science Credit(s): 3
- CIS 101 Computer Concepts & Apps Credit(s): 4
- CIS 210 Web Page Design & Structure Credit(s): 3
- CNSS 150 A+ Computer Maintenance Credit(s): 4
- GEOG 150 Map, Compass, & GPS Credit(s): 2
- GIS 201 Introduction to Geographic Information Systems Credit(s): 3

- GEOG 121 World Regional Geography Credits: 3
- XXXX xxx Social & Behavioral Science or Humanities Elective Credits: 3
- GIS 202 Data Management Credit(s): 3
- GIS 203 Spatial Analysis Credit(s): 4
- GIS 204 Advanced Cartography Credit(s): 4
- GIS 205 Remote Sensing Credit(s): 4
- GIS 272 GIS Co-op Internship Credit(s): 1-8 \*
- XXXX xxx Approved Electives Credit(s): 7

## Approved Elective (7 Credits)

- BUSN 203 Management Information Systems
  Credit(s): 3
- CIS 130 Spreadsheet Applications Credit(s): 3
- CIS 140 Database Applications Credit(s): 3
- CNSS 245 SQL Server Credit(s): 4
- CNSS 262 Web Server Administration Credit(s): 4
- GIS 273 GIS Co-op Internship Credit(s): 1-8 \*
- GIS 274 GIS Co-op Internship Credit(s): 1-8 \*

## Suggested Sequences Per Semester

#### First Semester

- ENGL 101 Rhetoric & Composition Credits: 3
- GEOG 110 Physical Geography Credits: 4
- CNSS 150 A plus Computer Maintenance Credits: 4
- GIS 201 Introduction to Geographic Information Systems Credits: 3

First Semester Total - Credit(s): 14 | Contacts: 18

#### Second Semester

- XXXX xxx Approved Elective Credits: 3 \*
- CIS 101 Computer Concepts & Apps Credits: 4
- GEOG 121 World Regional Geography Credits: 3
- GEOG 150 Map, Compass, & GPS Credits: 2
- XXXX xxx Social & Behavioral Science or Humanities Elective **Credits: 3**

Second Semester Total - Credit(s): 15 | Contacts: 15

## Third Semester

- CIS 210 Web Page Design & Structure Credits: 3
- MATH (MATH 105, MATH 107, or higher) Credits: 4
- BIOL 107 Environmental Science Credits: 3
- GIS 202 Data Management Credits: 3
- GIS 203 Spatial Analysis Credits: 4

Third Semester Total - Credit(s): 17 | Contacts: 17

#### Fourth Semester

- XXXX xxx Approved Elective Credits: 4 \*
- GIS 204 Advanced Cartography Credits: 4
- GIS 205 Remote Sensing Credits: 4
- GIS xxx Co-op\Internship Credits: 3 \*

Fourth Semester Total - Credit(s): 15 | Contacts: 15

NOTES: \* All Internships and Co-ops require that the student pass a criminal background check.